

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Original) A spring-loaded assembly for coupling a connector to a computer component comprising:

an assembly housing operable to receive a portion of a screw used to couple the connector to a chassis of an information handling system;

a sliding block disposed in the assembly housing and operably engaged with the screw, the sliding block operable to move the connector between a first position and a second position; and

a spring placed between the sliding block and at least one wall of the assembly housing, the spring operably provides an axial force to bias the connector to a first position, whereby coupling the connector to the computer component causes the connector to move to a connected position intermediate the first and second position.

2. (Original) The spring-loaded assembly of Claim 1, further comprising an extension member coupled to and extending from the block, the extension member operable to guide the movement of the spring.

3. (Original) The spring-loaded assembly of Claim 2, further comprising an end stop coupled to the assembly wall adjacent the spring, the end stop operable to interact with the extension member to fix the position of the second position.

4. (Original) The spring-loaded assembly of Claim 1, wherein the spring-loaded assembly is formed on a portion of the chassis of an information handling system.

5. (Original) The spring-loaded assembly of Claim 1, wherein the spring-loaded assembly is formed as a part of the connector.

6 ~~8~~. (Original) The spring-loaded assembly of Claim ~~1~~⁵, wherein the connector is a modified SATA connector.

7 ~~8~~. (Original) The spring-loaded assembly of Claim 1, wherein the axial force comprises a connector insertion force.

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8 10. (Original) An information handling system comprising:

a processor;

a memory communicatively coupled to the processor;

a connector communicatively coupled to the processor, the connector operable to provide communications between the processor and a computer component;

the connector having electrical contacts, the electrical contacts operable to couple to mated electrical contacts of the computer component;

a spring-loaded assembly associated with the connector, the spring-loaded assembly operable to move the connector along an axial direction to couple with the computer component; and

the spring-loaded assembly including:

an assembly housing operable to receive a portion of a screw used to couple the connector to a chassis of an information handling system;

a sliding block disposed in the assembly housing and operably engaged with the screw, the sliding block operable to move the connector between a first position and a second position; and

a spring placed between the sliding block and at least one wall of the assembly housing, the spring operably provides an axial force to bias the connector to a first position, whereby coupling the connector to the computer component causes the connector to move to a connected position intermediate the first and second position.

9 11. (Original) The information handling system of Claim 8 10, wherein the computer component is a hard disk drive.

10 12. (Original) The information handling system of Claim 8 10, wherein the connector is a Serial Advanced Technology Attachment (SATA) connector.

11 13. (Original) The information handling system of Claim 7 12, wherein the connected position varies based on variations in manufacturing tolerances of the computer component.

¹²14. (Original) The information handling system of Claim ⁷9, wherein the spring-loaded assembly further comprises a guide pin operable to align the electrical contacts of the connector with the mated electrical contacts of the computer component.

¹³⁻¹⁸
~~15-20~~ (Canceled)

¹⁹21. (New) A method of connecting a computer component to an information handling system, comprising:

attaching an assembly housing of a connector to a portion of an information handling system, the connector associated with a spring-loaded assembly having a first position and a second position such that the connector is biased to a first position, the assembly housing operable to receive a portion of a screw;

attaching the computer component to a mounting position with the information handling system such that the computer component forms a connection with the connector, the computer component operable to be in electrical communications with the information handling system via the connector; and

based on the mounting position of the computer component, automatically moving the connector in an axial direction to a connected position that is intermediate the first and second position.

²⁰22. (New) The method of Claim ¹⁹21, wherein the movement in the axial direction is based on a connector insertion force.

²¹23. (New) The method of Claim ¹⁹21, wherein the connection is a blind plug-in connection.

²²24. (New) The method of Claim ¹⁹21, further comprising maintaining an axial force between the connector and the computer component to prevent uncoupling due to shock or impact.

²³25. (New) The method of Claim ¹⁹21, wherein automatically moving the connector further comprises aligning a guide pin on the connector with the computer connector.

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²⁴26. (New) The method of Claim ¹⁹~~21~~, further comprising determining distance between the first position and the second position based on manufacturing tolerance of the computer component.